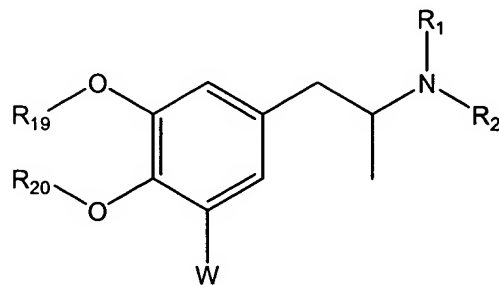


Amendments to the Claims

Please amend the claims as follows:

1. (original) A compound of the formula:



Formula I

wherein: R¹⁹ is lower alkyl or is taken together with R²⁰ to form a ring, which may be a five- or six-member ring, usually a five-member ring;

R²⁰ is lower alkyl, or is taken together with R¹⁹ to form a ring as discussed above,

R¹ is H or lower alkyl,

R² is H, lower alkyl, a protecting group or

- (a) $-(CH_2)_aC(O)(CH_2)_bSR^3$, wherein a is 0 to 5, b is 1 to 5 and R³ is H or lower alkyl or $(CH_2)_cC(O)NR^4R^5$ wherein R⁴ is H or lower alkyl and R⁵ is H, an immunogenic carrier or a label, or
- (b) $(A)_d(Q)_n$ wherein Q is H or $-(CH_2)_eCH(R^8)(CH_2)_fOC(O)(CH_2)_gR^9$ being H only when d is 1 wherein A is $-C(O)(CH_2)_hC(O)NR^{10}((CH_2)_jO(CH_2)_kO)_m(CH_2)_2NR^{11}$ -, d is 0 or 1, n is 0 or 1 wherein one of d or n is 1, h is 1 to 5, R¹⁰ is H or lower alkyl, j is 1 to 5, k is 1 to 5, m is 1 to 3, R¹¹ is H or lower alkyl, e is 1 to 5, R⁸ is OH or H, f is 1 to 5, g is 0 to 5, and R⁹ is H, an immunogenic carrier or a label;

W is H or JR¹⁴ being H when R² is other than H or lower alkyl, wherein

J is O or S,

R¹⁴ is H, lower alkyl, a protecting group, or $-(CH_2)_rC(O)NR^{15}(CH_2)_s(D)_tR^{16}$, wherein r is 1 to 5, R¹⁵ is H or lower alkyl, s is 1 to 5, D is S, O or N, t is 0 or 1 being 0 when R¹⁶ is maleimidyl or succinimidyl, R¹⁶ is H, maleimidyl, succinimidyl, or $-(CH_2)_qC(O)NR^{17}R^{18}$,

q is 1 to 5,
R¹⁷ is H or lower alkyl,
R¹⁸ is H, lower alkyl, an immunogenic carrier or label,
and including the acid salts thereof.

2. (original) A compound according to Claim 1 wherein R¹ is H and R² is H.

3. (original) A compound according to Claim 1 wherein R¹ is H and R² is lower alkyl.

4. (original) A compound according to Claim 3 wherein R¹⁶ is -(CH₂)_qC(O)NR¹⁷R¹⁸ and R¹⁸ is a poly(amino acid).

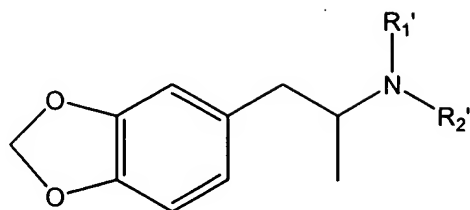
56. (currently amended) A compound according to Claim 1 wherein R¹ is H or lower alkyl, W is H and R² is -(CH₂)_aC(O)(CH₂)_bSR³, wherein R³ is -(CH₂)_cC(O)NR⁴R⁵ wherein R⁴ is H or lower alkyl and R⁵ is a poly(amino acid).

67. (currently amended) A compound according to Claim 1 wherein R¹ is H or lower alkyl, W is H and R² is -(CH₂)_aC(O)(CH₂)_bSR³, wherein R³ is -(CH₂)_cC(O)NR⁴R⁵ wherein R⁴ is H or lower alkyl and R⁵ is an immunogenic carrier.

78. (currently amended) A compound according to Claim 1 wherein R¹ is H or lower alkyl, W is H and R² is (A)_d(Q)_n wherein d is 0, n is 1, Q is -(CH₂)_eCH(R⁸)(CH₂)_fOC(O)(CH₂)_gR⁹ and R⁹ is a poly(amino) acid.

89. (currently amended) A compound according to Claim 1 wherein R¹ is H or lower alkyl, W is H and R² is (A)_d(Q)_n wherein d is 1, n is 1, Q is -(CH₂)_eCH(R⁸)(CH₂)_fOC(O)(CH₂)_gR⁹ and A is -C(O)(CH₂)_hC(O)NR¹⁰((CH₂)_jO(CH₂)_kO)_m(CH₂)₂NR¹¹-, and R⁹ is a poly(amino) acid.

910. (currently amended) A compound of the formula:



Formula II

wherein: R^{1'} is H, lower alkyl or a protecting group,

R^{2'} is a protecting group, or

- (a) $-(CH_2)_aC(O)(CH_2)_bSR^{3'}$, wherein a is 0 to 5, b is 1 to 5 and R^{3'} is H or lower alkyl or $(CH_2)_cC(O)NR^{4'}R^{5'}$, wherein R^{4'} is H or lower alkyl and R^{5'} is H, an immunogenic carrier or a label, or
- (b) $(A)_d(Q)_n$ wherein Q is H or $-(CH_2)_eCH(R^{8'})[(CH_2)_fOC(O)(CH_2)_gR^{9'}$ being H only when d is 1 wherein A is $-C(O)(CH_2)_hC(O)NR^{10}[(CH_2)_jO(CH_2)_kO]_m(CH_2)_2NR^{11}-$, d is 0 or 1, n is 0 or 1 wherein one of d or n is 1, h is 1 to 5, R¹⁰ is H or lower alkyl, j is 1 to 5, k is 1 to 5, m is 1 to 3, R¹¹ is H or lower alkyl, e is 1 to 5, R^{8'} is OH or H, f is 1 to 5, g is 0 to 5, and R^{9'} is H, an immunogenic carrier or a label,

and including the acid salts thereof.

1014. (currently amended) A compound according to Claim 910 wherein R^{1'} is H or lower alkyl and R^{2'} is $-(CH_2)_aC(O)(CH_2)_bSR^3$ wherein a is 0, b is 1, R³ is H.

1112. (currently amended) A compound according to Claim 910 wherein R^{1'} is H or lower alkyl and R^{2'} is $-(CH_2)_aC(O)(CH_2)_bSR^{3'}$ wherein a is 0, b is 1, R^{3'} is $(CH_2)_cC(O)NR^{4'}R^{5'}$ wherein c is 1, R^{4'} is H and R^{5'} is a poly(amino) acid.

1213. (currently amended) A compound according to Claim 1112 wherein said poly(amino) acid is an enzyme or an immunogen.

1314. (currently amended) A compound according to Claim 910 wherein R^{1'} is H or lower alkyl and R^{2'} is $-(CH_2)_aC(O)(CH_2)_bSR^{3'}$ wherein a is 0, b is 1, R^{3'} is $(CH_2)_cC(O)NR^{4'}R^{5'}$ wherein c is 1, R^{4'} is H and R^{5'} is an immunogenic carrier.

1415. (currently amended) A compound according to Claim 910 wherein $R^{1'}$ is H or lower alkyl and $R^{2'}$ is $-(CH_2)_aC(O)(CH_2)_bSR^{3'}$ wherein a is 0, b is 1, $R^{3'}$ is $(CH_2)_cC(O)NR^{4'}R^{5'}$ wherein c is 1, $R^{4'}$ is H and $R^{5'}$ is a particle.

1516. (currently amended) A compound according to Claim 910 wherein $R^{1'}$ is H or lower alkyl and $R^{2'}$ is $(A)_d(Q)_n$ wherein d is 0, n is 1, Q is $-(CH_2)_eCH(R^{8'})OC(O)(CH_2)_gR^{9'}$, e is 1, $R^{8'}$ is OH, f is 1, g is 0 and $R^{9'}$ is a poly(amino) acid.

1617. (currently amended) A compound according to Claim 1516 wherein said poly(amino) acid is an enzyme or an immunogen.

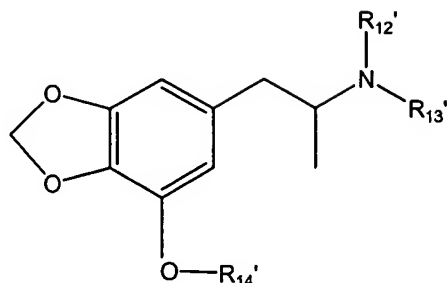
1718. (currently amended) A compound according to Claim 910 wherein $R^{1'}$ is H or lower alkyl and $R^{2'}$ is $(A)_d(Q)_n$ wherein d is 0, n is 1, Q is H, A is $-C(O)(CH_2)_hC(O)NR^{10'}((CH_2)_jO(CH_2)_kO)_m(CH_2)_2NR^{11-}$, $R^{10'}$ is H, h is 2, m is 1, j is 2, k is 2, $R^{10'}$ is H.

1819. (currently amended) A compound according to Claim 910 wherein $R^{1'}$ is H or lower alkyl and $R^{2'}$ is $(A)_d(Q)_n$ wherein d is 1, n is 1, Q is $-(CH_2)_eCH(R^{8'})OC(O)(CH_2)_gR^{9'}$, e is 1, $R^{8'}$ is OH, f is 1, g is 0, A is $-C(O)(CH_2)_hC(O)NR^{10'}((CH_2)_jO(CH_2)_kO)_m(CH_2)_2NR^{11-}$, $R^{10'}$ is H, h is 2, m is 1, j is 2, k is 2, $R^{10'}$ is H and $R^{9'}$ is a poly(amino) acid or a particle.

1920. (currently amended) A compound according to Claim 1819 wherein $R^{9'}$ is a poly(amino) acid, which is an enzyme or an immunogen.

2021. (currently amended) A compound according to Claim 1819 wherein $R^{9'}$ is a particle.

2122. (currently amended) A compound of the formula:



Formula III

wherein: R^{12'} is H or lower alkyl,
R^{13'} is H or lower alkyl,
R^{14'} is a protecting group, or -(CH₂)_rC(O)NR^{15'}(CH₂)_s(D)_tR^{16'}, wherein r is 1 to 5, R^{15'} is H or lower alkyl, s is 1 to 5, D is S, O or N, t is 0 or 1 being 0 when R^{16'} is maleimidyl or succinimidyl, R^{16'} is H, a protecting group, maleimidyl or succinimidyl, or -(CH₂)_qC(O)NR^{17'}R^{18'},
R^{17'} is H, lower alkyl or a protecting group,
R^{18'} is H, lower alkyl, a protecting group, an immunogenic carrier or label,
and including salts thereof.

2223. (currently amended) A compound according to Claim 2122 wherein R^{12'} is H and R^{13'} is H or lower alkyl, R^{14'} is -(CH₂)_rC(O)NR^{15'}(CH₂)_s(D)_tR^{16'}, wherein r is 1, R^{15'} is H, s is 2, D is S, t is 1 and R^{16'} is H.

2324. (currently amended) A compound according to Claim 2122 wherein R^{12'} is H and R^{13'} is H or lower alkyl, R^{14'} is -(CH₂)_rC(O)NR^{15'}(CH₂)_s(D)_tR^{16'}, wherein r is 1, R^{15'} is H, s is 2, t is 0 and R^{16'} is succinimidyl or maleimidyl.

2425. (currently amended) A compound according to Claim 2122 wherein R^{12'} is H and R^{13'} is H or lower alkyl, R^{14'} is -(CH₂)_rC(O)NR^{15'}(CH₂)_s(D)_tR^{16'}, wherein r is 1, R^{15'} is H, s is 2, D is S, t is 1 and R^{16'} is -(CH₂)_qC(O)NR^{17'}R^{18'}, q is 1, R^{17'} is H and R^{18'} is a poly(amino) acid or a particle.

2526. (currently amended) A compound according to Claim 2425 wherein R^{18'} is a particle.

2627. (currently amended) An antibody raised against a compound according to Claim 1617 wherein said poly(amino) acid is an immunogen..

2728. (currently amended) An antibody raised against a compound according to Claim 1920 wherein said poly(amino) acid is an immunogen..

2829. (currently amended) An antibody raised against a compound according to Claim 2425 wherein R¹⁷, is a poly(amino) acid, which is an immunogen..

2930. (currently amended) A reagent system comprising a compound according to Claim 1617 wherein said poly(amino) acid is an enzyme, an antibody for methylenedioxyamphetamine and/or an antibody for methylenedioxymethamphetamine and/or an antibody for methylenedioxyethamphetamine.

3031. (currently amended) A reagent system comprising a compound according to Claim 1920 wherein said poly(amino) acid is an enzyme, an antibody for methylenedioxyamphetamine and/or an antibody for methylenedioxymethamphetamine and/or an antibody for methylenedioxyethamphetamine.

3132. (currently amended) A reagent system comprising a compound according to Claim 2425 wherein R¹⁷, is a poly(amino) acid, which is an enzyme, an antibody for methylenedioxyamphetamine and/or an antibody for methylenedioxymethamphetamine and/or an antibody for methylenedioxyethamphetamine.

3233. (currently amended) A method for determining methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in a sample suspected of containing methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine, said method comprising:

- (a) providing in combination in a medium:
 - (i) said sample and
 - (ii) a reagent system according to Claim 2930; and

(b) examining said medium for the presence of a complex comprising said methylenedioxyamphetamine and said antibody for methylenedioxyamphetamine and/or a complex of said methylenedioxymethamphetamine and said antibody for methylenedioxymethamphetamine, the presence thereof indicating the presence of said methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in said sample.

3334. (currently amended) A method according to Claim 3233 wherein said examining comprises measuring signal from said enzyme, the amount thereof being related to the presence of said methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in said sample.

3435. (currently amended) A method according to Claim 3334 wherein said method is a homogeneous method and said medium is examined for the amount of said signal.

3536. (currently amended) A method according to Claim 3334 wherein said method is a heterogeneous method and said complex, if present, is separated from said medium and said medium or said complex is examined for the amount of said signal.

3637. (currently amended) A method for determining methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in a sample suspected of containing methylenedioxyamphetamine and/or methylenedioxy-methamphetamine and/or methylenedioxyethamphetamine, said method comprising:

- (a) providing in combination in a medium:
 - (i) said sample and
 - (ii) a reagent system according to Claim 3034; and

(b) examining said medium for the presence of a complex comprising said methylenedioxyamphetamine and said antibody for methylenedioxyamphetamine and/or a complex of said methylenedioxymethamphetamine and said antibody for methylenedioxymethamphetamine and/or a complex of said methylenedioxyethamphetamine and said antibody for methylenedioxyethamphetamine, the presence thereof indicating the presence of said

methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in said sample.

3738. (currently amended) A method according to Claim 3637 wherein said examining comprises measuring signal from said enzyme, the amount thereof being related to the presence of said methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in said sample.

3839. (currently amended) A method according to Claim 3738 wherein said method is a homogeneous method and said medium is examined for the amount of said signal.

3940. (currently amended) A method according to Claim 3738 wherein said method is a heterogeneous method and said complex, if present, is separated from said medium and said medium or said complex is examined for the amount of said signal.

4041. (currently amended) A method for determining methylenedioxyamphetamine and/or methylenedioxymethamphetamine in a sample suspected of containing methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine, said method comprising:

- (a) providing in combination in a medium:
 - (i) said sample and
 - (ii) a reagent system according to Claim 3132; and
- (b) examining said medium for the presence of a complex comprising said methylenedioxyamphetamine and said antibody for methylenedioxyamphetamine and/or a complex of said methylenedioxymethamphetamine and said antibody for methylenedioxymethamphetamine and/or a complex of said methylenedioxymethamphetamine and said antibody for methylenedioxymethamphetamine, the presence thereof indicating the presence of said methylenedioxyamphetamine and/or methylenedioxymethamphetamine in said sample.

4142. (currently amended) A method according to Claim 4041 wherein said examining comprises measuring signal from said enzyme, the amount thereof being related to the presence of

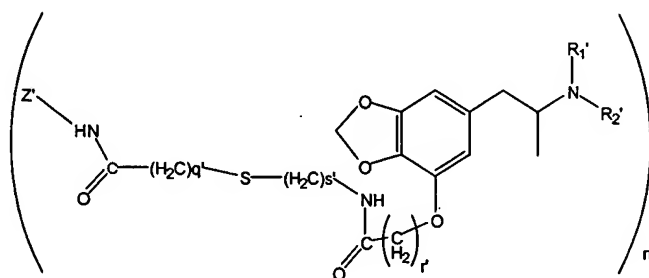
said methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in said sample.

4243. (currently amended) A method according to Claim 4142 wherein said method is a homogeneous method and said medium is examined for the amount of said signal.

43[[44]]. (currently amended) A method according to Claim 4142 wherein said method is a heterogeneous method and said complex, if present, is separated from said medium and said medium or said complex is examined for the amount of said signal.

4445. (currently amended) A method for determining amphetamine and/or methamphetamine and/or methylenedioxyethamphetamine in a sample suspected of containing methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine, said method comprising:

- (a) providing in combination in a medium:
- (i) said sample,
 - (ii) an antibody for methylenedioxyamphetamine, and/or
 - (iii) an antibody for methylenedioxymethamphetamine, and/or
 - (iv) an antibody for methylenedioxyethamphetamine, and
 - (v) a compound of the formula:



wherein:

- R_1' is H,
- R_2' is H, methyl or ethyl,
- r' is 1 to 5,
- s' is 1 to 5,

q' is 1 to 5,
Z' is an enzyme,
n' is an integer between 1 and the molecular weight of said enzyme divided by about 500;
and

(b) examining said medium for the presence of a complex comprising said methylenedioxyamphetamine and said antibody for methylenedioxyamphetamine and/or a complex of said methylenedioxymethamphetamine and said antibody for methylenedioxymethamphetamine and/or a complex of said methylenedioxyethamphetamine and said antibody for methylenedioxyethamphetamine, the presence thereof indicating the presence of said methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in said sample.

4546. (currently amended) A method according to Claim 4445 wherein said examining comprises measuring signal from said enzyme, the amount thereof being related to the presence of said methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in said sample.

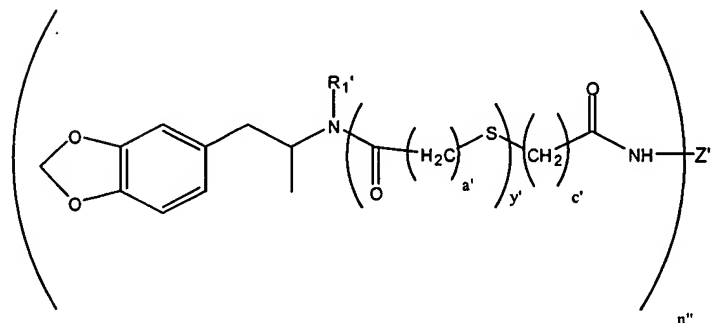
4647. (currently amended) A method according to Claim 4546 wherein said method is a homogeneous method and said medium is examined for the amount of said signal.

4748. (currently amended) A method according to Claim 4546 wherein said method is a heterogeneous method and said complex, if present, is separated from said medium and said medium or said complex is examined for the amount of said signal.

4849. (currently amended) A method according to Claim 4445 wherein said enzyme is glucose-6-phosphate dehydrogenase.

4950. (currently amended) A method for determining methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in a sample suspected of containing methylenedioxyamphetamine and/or methylenedioxy-methamphetamine and/or methylenedioxyethamphetamine, said method comprising:

- (a) providing in combination in a medium:
- (i) said sample,
 - (ii) an antibody for methylenedioxyamphetamine, and/or
 - (iii) an antibody for methylenedioxymethamphetamine, and/or
 - (iv) an antibody for methylenedioxyethamphetamine, and
 - (v) a compound of the formula:



wherein:

- R^{1'} is H, or methyl, or ethyl,
 - a' is 1 to 5,
 - y' is 1,
 - Z' is an enzyme,
 - c' is 1 to 5,
 - n' is an integer between 1 and the molecular weight of said enzyme divided by about 500;
- and
- (b) examining said medium for the presence of a complex comprising said methylenedioxyamphetamine and said antibody for methylenedioxyamphetamine and/or a complex of said methylenedioxymethamphetamine and said antibody for methylenedioxymethamphetamine and/or a complex of said methylenedioxyethamphetamine and said antibody for methylenedioxyethamphetamine, the presence thereof indicating the presence of said methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxymethamphetamine in said sample.

5051. (currently amended) A method according to Claim 4950 wherein said examining comprises measuring signal from said enzyme, the amount thereof being related to the presence of

said methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in said sample.

5152. (currently amended) A method according to Claim 5051 wherein said method is a homogeneous method and said medium is examined for the amount of said signal.

5253. (currently amended) A method according to Claim 5051 wherein said method is a heterogeneous method and said complex, if present, is separated from said medium and said medium or said complex is examined for the amount of said signal.

5354. (currently amended) A method according to Claim 4950 wherein said enzyme is glucose-6-phosphate dehydrogenase.

5455. (currently amended) A method for determining methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in a sample suspected of containing methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine, said method comprising:

(a) providing in combination in a medium:

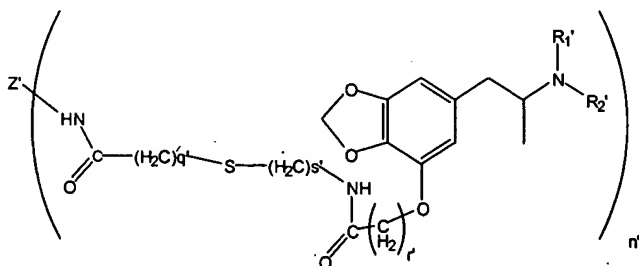
(i) said sample,

(ii) conjugate of an enzyme and a methylenedioxyamphetamine

analog and/or a conjugate of an enzyme and a methylenedioxymethamphetamine analog and/or a conjugate of an enzyme and a methylenedioxyethamphetamine analog,

(i) an antibody for methylenedioxyamphetamine, said antibody

being raised against a compound of the formula:



wherein:

R^{1'} is H,

$R^{2'}$ is H,

r' is 1 to 5,

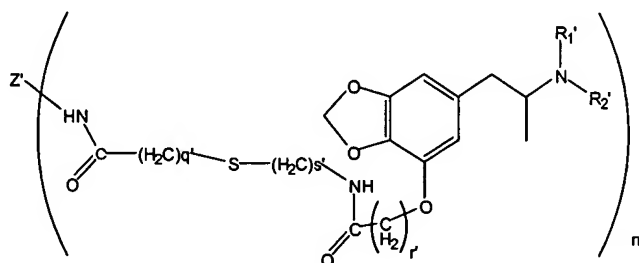
s' is 1 to 5,

q' is 1 to 5,

Z' is an immunogenic protein or a non-poly(amino acid) immunogenic carrier,

n'' is an integer between 1 and the molecular weight of said immunogenic protein or said immunogenic carrier divided by about 500; and/or

(iv) an antibody for methylenedioxymethamphetamine, said antibody being raised against a compound of the formula:



wherein:

$R^{1'}$ is H,

$R^{2'}$ is methyl,

r' is 1 to 5,

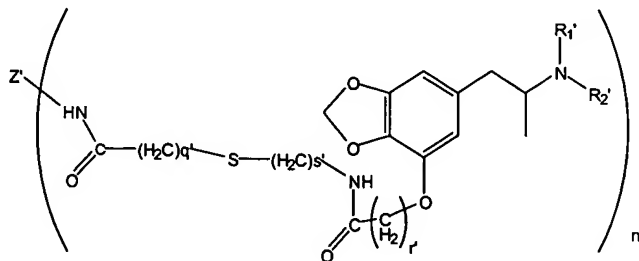
s' is 1 to 5,

q' is 1 to 5,

Z' is an immunogenic protein or a non-poly(amino acid) immunogenic carrier,

n'' is an integer between 1 and the molecular weight of said immunogenic protein or said immunogenic carrier divided by about 500; and/or

(v) an antibody for methylenedioxyethamphetamine, said antibody being raised against a compound of the formula:



wherein:

R¹ is H,

R² is ethyl,

r' is 1 to 5,

s' is 1 to 5,

q' is 1 to 5,

Z' is an immunogenic protein or a non-poly(amino acid) immunogenic carrier,

n' is an integer between 1 and the molecular weight of said immunogenic protein or said immunogenic carrier divided by about 500; and

(b) examining said medium for the presence of a complex comprising said methylenedioxyamphetamine and said antibody for methylenedioxyamphetamine and/or a complex of said methylenedioxymethamphetamine and said antibody for methylenedioxymethamphetamine and/or a complex of said methylenedioxyethamphetamine and said antibody for methylenedioxyethamphetamine, the presence thereof indicating the presence of said methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in said sample.

5556. (currently amended) A method according to Claim 5455 wherein said examining comprises measuring signal from said enzyme, the amount thereof being related to the presence of said methylenedioxyamphetamine and/or methylenedioxymethamphetamine and/or methylenedioxyethamphetamine in said sample.

5657. (currently amended) A method according to Claim 5556 wherein said method is a homogeneous method and said medium is examined for the amount of said signal.

5758. (currently amended) A method according to Claim 5556 wherein said method is a heterogeneous method and said complex, if present, is separated from said medium and said medium or said complex is examined for the amount of said signal.

58. (original) A method according to Claim 55 wherein said enzyme is glucose-6-phosphate dehydrogenase.

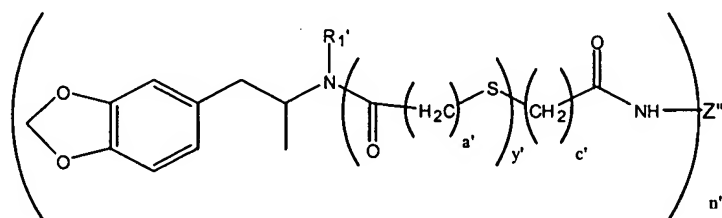
59. (original) A method for determining methylenedioxyamphetamine and/or methylenedioxymethamphetamine in a sample suspected of containing methylenedioxyamphetamine and/or methylenedioxymethamphetamine, said method comprising:

(a) providing in combination in a medium:

(i) said sample,

(ii) a conjugate of an enzyme and an methylenedioxyamphetamine analog and/or a conjugate of an enzyme and a methylenedioxymethamphetamine analog and/or a conjugate of an enzyme and a methylenedioxyethamphetamine analog,

(i) an antibody for methylenedioxyamphetamine, said antibody being raised against a compound of the formula:



wherein:

$R^{1'}$ is H,

a' is 1 to 5,

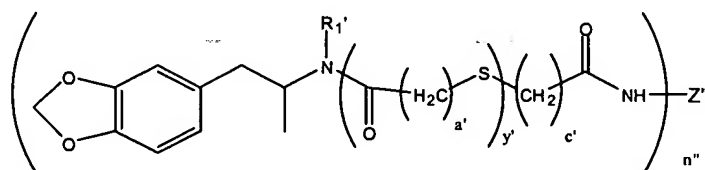
y' is 1,

Z'' is an immunogenic protein or a non-poly(amino acid) immunogenic carrier,

c' is 1 to 5,

n'' is an integer between 1 and the molecular weight of said immunogenic protein or said immunogenic carrier divided by about 500; and/or

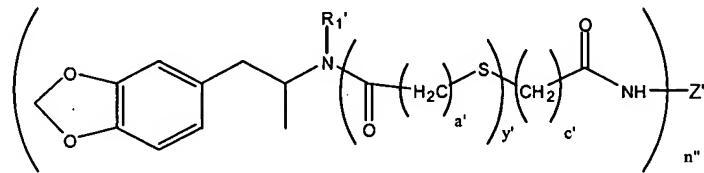
(iv) an antibody for methylenedioxymethamphetamine, said antibody being raised against a compound of the formula:

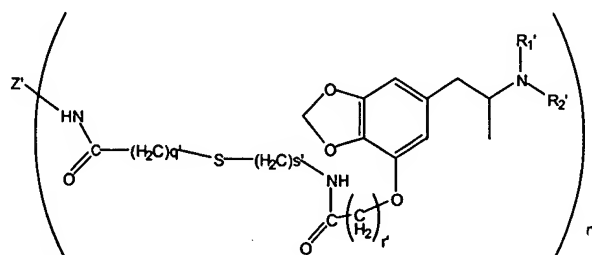


wherein:

$R^{1'}$ is methyl,

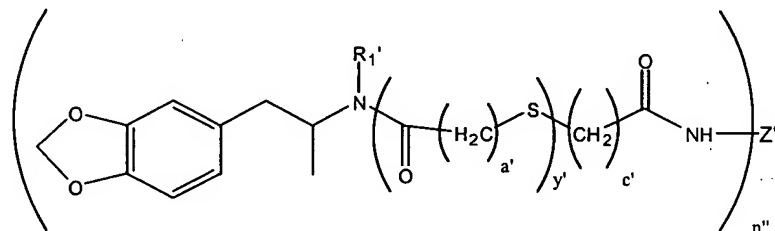
a' is 1 to 5,





66. (original) A kit comprising in packaged combination:

- (i) an antibody for methylenedioxyamphetamine,
- (ii) an antibody for methylenedioxymethamphetamine, and/or
- (iii) an antibody for methylenedioxyethamphetamine, and
- (iv) a compound of the formula:



wherein:

R^{1'} is H, methyl or ethyl,

a' is 1 to 5, usually 1,

y' is 0 or 1,

Z' is an enzyme such as, for example, glucose-6-phosphate dehydrogenase,

c' is 1 to 5,

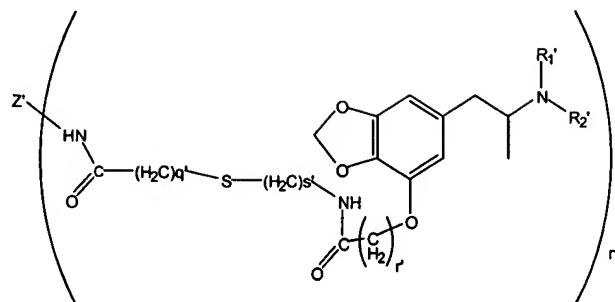
n' is an integer between 1 and the molecular weight of said enzyme divided by about 500.

67. (original) A kit according to Claim 66 wherein said enzyme is glucose-6-phosphate dehydrogenase.

68. (original) A kit comprising in packaged combination:

(i) a conjugate of an enzyme and a methylenedioxyamphetamine analog and/or a conjugate of an enzyme and a methylenedioxymethamphetamine analog, and/or a conjugate of an enzyme and a methylenedioxyethamphetamine analog; and

(ii) an antibody for methylenedioxyamphetamine, said antibody being raised against a compound of the formula:



wherein:

R^{1'} is H,

R^{2'} is H,

r' is 1 to 5,

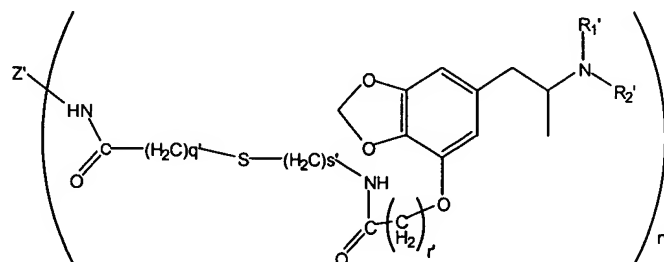
s' is 1 to 5,

q' is 1 to 5,

Z' is an immunogenic protein or a non-poly(amino acid) immunogenic carrier,

n' is an integer between 1 and the molecular weight of said immunogenic protein or said immunogenic carrier divided by about 500; and/or

(iii) an antibody for methylenedioxymethamphetamine, said antibody being raised against a compound of the formula:



wherein:

R^{1'} is H,

R^{2'} is methyl,

r' is 1 to 5,

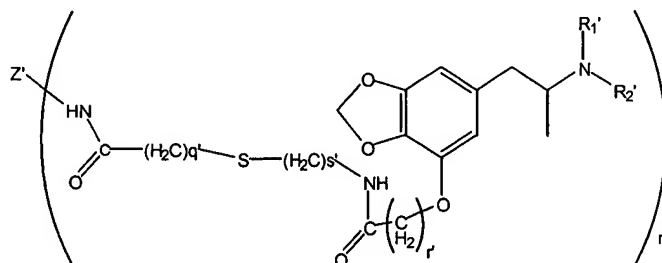
s' is 1 to 5,

q' is 1 to 5,

Z' is an immunogenic protein or a non-poly(amino acid) immunogenic carrier,

n' is an integer between 1 and the molecular weight of said immunogenic protein or said immunogenic carrier divided by about 500, and/or

(iv) an antibody for methylenedioxyethamphetamine, said antibody being raised against a compound of the formula:



wherein:

$R^{1'}$ is H,

$R^{2'}$ is ethyl,

r' is 1 to 5,

s' is 1 to 5,

q' is 1 to 5,

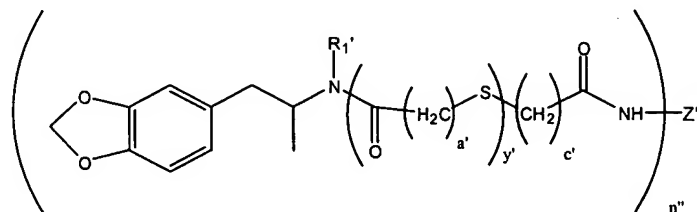
Z' is an immunogenic protein or a non-poly(amino acid) immunogenic carrier,

n' is an integer between 1 and the molecular weight of said immunogenic protein or said immunogenic carrier divided by about 500.

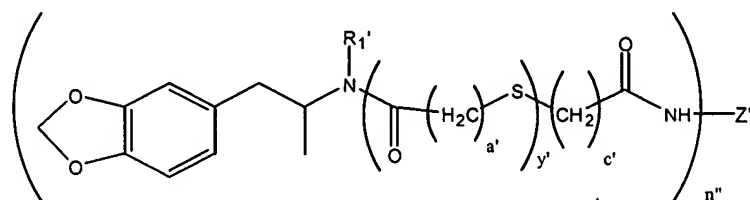
69. (original) A kit comprising in packaged combination:

(i) a conjugate of an enzyme and an methylenedioxyamphetamine analog and/or a conjugate of an enzyme and a methylenedioxymethamphetamine analog, and

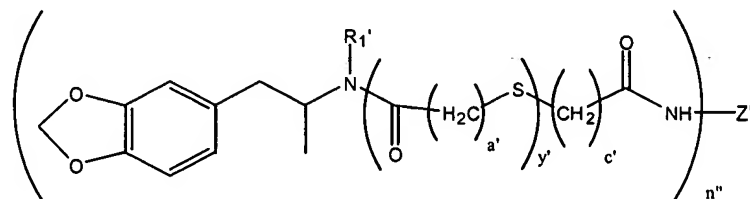
(ii) an antibody for methylenedioxyamphetamine, said antibody being raised against a compound of the formula:



(iii) an antibody for methylenedioxymethamphetamine, said antibody being raised against a compound of the formula:



(iv) an antibody for methylenedioxyamphetamine, said antibody being raised against a compound of the formula:



a' is 1 to 5,

y' is 0 or 1, usually 1,

Z'' is an immunogenic protein or a non-poly(amino acid) immunogenic carrier,

c' is 1 to 5,

n'' is an integer between 1 and the molecular weight of said immunogenic protein or said immunogenic carrier divided by about 500.